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RAW SEQUENCE LISTING

DATE: 04/14/2003

PATENT APPLICATION: US/09/622,613B

TIME: 16:08:15

Input Set : A:\Nih343-1.app

Output Set: N:\CRF4\04142003\I622613B.raw

3 <110> APPLICANT: Rybak, Susanna M.
4 Newton, Dianne L.
5 The United States of America
6 as represented by The Secretary of the
7 Department of Health and Human Services
9 <120> TITLE OF INVENTION: Recombinant Anti-Tumor RNase
11 <130> FILE REFERENCE: 015280-343100US
13 <140> CURRENT APPLICATION NUMBER: US 09/622,613B
14 <141> CURRENT FILING DATE: 2000-08-17
16 <150> PRIOR APPLICATION NUMBER: US 60/079,751
17 <151> PRIOR FILING DATE: 1998-03-27
19 <150> PRIOR APPLICATION NUMBER: WO PCT/US99/06641
20 <151> PRIOR FILING DATE: 1999-03-26
22 <160> NUMBER OF SEQ ID NOS: 43
24 <170> SOFTWARE: PatentIn Ver. 2.0
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27 <211> LENGTH: 312
28 <212> TYPE: DNA
29 <213> ORGANISM: Rana pipiens
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33 <222> LOCATION: (1)..(312)
34 <223> OTHER INFORMATION: ribonuclease (RaPLR1)
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38 Gln Asp Trp Leu Thr Phe Gln Lys Lys His Leu Thr Asn Thr Arg Asp
39 1 5 10 15
41 gtt gac tgt aat aat atc atg tca aca aac ttg ttc cac tgc aag gac 96
42 Val Asp Cys Asn Asn Ile Met Ser Thr Asn Leu Phe His Cys Lys Asp
43 20 25 30
45 aag aac act ttt atc tat tca cgt cct gag cca gtg aag gcc atc tgt 144
46 Lys Asn Thr Phe Ile Tyr Ser Arg Pro Glu Pro Val Lys Ala Ile Cys
47 35 40 45
49 aaa gga att ata gcc tcc aaa aat gtg tta act acc tct gag ttt tat 192
50 Lys Gly Ile Ile Ala Ser Lys Asn Val Leu Thr Thr Ser Glu Phe Tyr
51 50 55 60
53 ctc tct gat tgc aat gta aca agc agg cct tgc aag tat aaa tta aag 240
54 Leu Ser Asp Cys Asn Val Thr Ser Arg Pro Cys Lys Tyr Lys Leu Lys
55 65 70 75 80
57 aaa tca act aat aca ttt tgt gta act tgt gag aat caa gct cca gta 288
58 Lys Ser Thr Asn Thr Phe Cys Val Thr Cys Glu Asn Gln Ala Pro Val
59 85 90 95
61 cat ttc gtg ggt gtc gga cat tgc 312

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75 Val Asp Cys Asn Asn Ile Met Ser Thr Asn Leu Phe His Cys Lys Asp
76 20 25 30
78 Lys Asn Thr Phe Ile Tyr Ser Arg Pro Glu Pro Val Lys Ala Ile Cys
79 35 40 45
81 Lys Gly Ile Ile Ala Ser Lys Asn Val Leu Thr Thr Ser Glu Phe Tyr
82 50 55 60
84 Leu Ser Asp Cys Asn Val Thr Ser Arg Pro Cys Lys Tyr Lys Leu Lys
85 65 70 75 80
87 Lys Ser Thr Asn Thr Phe Cys Val Thr Cys Glu Asn Gln Ala Pro Val
88 85 90 95
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96 <212> TYPE: DNA
97 <213> ORGANISM: Artificial Sequence
99 <220> FEATURE:
100 <223> OTHER INFORMATION: Description of Artificial Sequence:Rana pipiens
101 ribonuclease with Met23Leu substitution
102 (recombinant RaPLR1 Met23Leu)
104 <220> FEATURE:
105 <221> NAME/KEY: CDS
106 <222> LOCATION: (1)..(312)
107 <223> OTHER INFORMATION: RaPLR1 Met23Leu
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112 1 5 10 15
114 gtt gac tgt aat aat atc ctg tca aca aac ttg ttc cac tgc aag gac 96
115 Val Asp Cys Asn Asn Ile Leu Ser Thr Asn Leu Phe His Cys Lys Asp
116 20 25 30
118 aag aac act ttt atc tat tca cgt cct gag cca gtg aag gcc atc tgt 144
119 Lys Asn Thr Phe Ile Tyr Ser Arg Pro Glu Pro Val Lys Ala Ile Cys
120 35 40 45
122 aaa gga att ata gcc tcc aaa aat gtg tta act acc ttt gag ttt tat 192
123 Lys Gly Ile Ile Ala Ser Lys Asn Val Leu Thr Thr Phe Glu Phe Tyr
124 50 55 60
126 ctc tct gat tgc aat gta aca agc agg cct tgc aag tat aaa tta aag 240
127 Leu Ser Asp Cys Asn Val Thr Ser Arg Pro Cys Lys Tyr Lys Leu Lys
128 65 70 75 80

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130 aaa tca act aat aca ttt tgt gta act tgt gag aat caa gct cca gta      288
131 Lys Ser Thr Asn Thr Phe Cys Val Thr Cys Glu Asn Gln Ala Pro Val
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134 cat ttc gtg ggt gtc gga cat tgc                                     312
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145 <223> OTHER INFORMATION: Description of Artificial Sequence:Rana pipiens
146     ribonuclease with Met23Leu substitution
147     (recombinant RaPLR1 Met23Leu)
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153 Val Asp Cys Asn Asn Ile Leu Ser Thr Asn Leu Phe His Cys Lys Asp
154                               20                               25                               30
156 Lys Asn Thr Phe Ile Tyr Ser Arg Pro Glu Pro Val Lys Ala Ile Cys
157   35                               40                               45
159 Lys Gly Ile Ile Ala Ser Lys Asn Val Leu Thr Thr Phe Glu Phe Tyr
160   50                               55                               60
162 Leu Ser Asp Cys Asn Val Thr Ser Arg Pro Cys Lys Tyr Lys Leu Lys
163  65                               70                               75                               80
165 Lys Ser Thr Asn Thr Phe Cys Val Thr Cys Glu Asn Gln Ala Pro Val
166                               85                               90                               95
168 His Phe Val Gly Val Gly His Cys
169                               100
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174 <212> TYPE: DNA
175 <213> ORGANISM: Artificial Sequence
177 <220> FEATURE:
178 <223> OTHER INFORMATION: Description of Artificial Sequence:Rana pipiens
179     ribonuclease with Met at position 1 (recombinant
180     Met(-1) RaPLR1)
182 <220> FEATURE:
183 <221> NAME/KEY: CDS
184 <222> LOCATION: (1)..(315)
185 <223> OTHER INFORMATION: Met(-1) RaPLR1
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188 atg caa gac tgg ctt acg ttt cag aag aag cac ctg aca aac acc cgg      48
189 Met Gln Asp Trp Leu Thr Phe Gln Lys Lys His Leu Thr Asn Thr Arg
190   1                               5                               10                               15
192 gat gtt gac tgt aat aat atc atg tca aca aac ttg ttc cac tgc aag      96
193 Asp Val Asp Cys Asn Asn Ile Met Ser Thr Asn Leu Phe His Cys Lys
194                               20                               25                               30
196 gac aag aac act ttt atc tat tca cgt cct gag cca gtg aag gcc atc     144

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197 Asp Lys Asn Thr Phe Ile Tyr Ser Arg Pro Glu Pro Val Lys Ala Ile
198          35          40          45
200 tgt aaa gga att ata gcc tcc aaa aat gtg tta act acc tct gag ttt 192
201 Cys Lys Gly Ile Ile Ala Ser Lys Asn Val Leu Thr Thr Ser Glu Phe
202          50          55          60
204 tat ctc tct gat tgc aat gta aca agc agg cct tgc aag tat aaa tta 240
205 Tyr Leu Ser Asp Cys Asn Val Thr Ser Arg Pro Cys Lys Tyr Lys Leu
206 65          70          75          80
208 aag aaa tca act aat aca ttt tgt gta act tgt gag aat caa gct cca 288
209 Lys Lys Ser Thr Asn Thr Phe Cys Val Thr Cys Glu Asn Gln Ala Pro
210          85          90          95
212 gta cat ttc gtg ggt gtc gga cat tgc 315
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219 <212> TYPE: PRT
220 <213> ORGANISM: Artificial Sequence
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223 <223> OTHER INFORMATION: Description of Artificial Sequence:Rana pipiens
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225      Met(-1) RaPLR1)
227 <400> SEQUENCE: 6
228 Met Gln Asp Trp Leu Thr Phe Gln Lys Lys His Leu Thr Asn Thr Arg
229 1          5          10          15
231 Asp Val Asp Cys Asn Asn Ile Met Ser Thr Asn Leu Phe His Cys Lys
232          20          25          30
234 Asp Lys Asn Thr Phe Ile Tyr Ser Arg Pro Glu Pro Val Lys Ala Ile
235          35          40          45
237 Cys Lys Gly Ile Ile Ala Ser Lys Asn Val Leu Thr Thr Ser Glu Phe
238          50          55          60
240 Tyr Leu Ser Asp Cys Asn Val Thr Ser Arg Pro Cys Lys Tyr Lys Leu
241 65          70          75          80
243 Lys Lys Ser Thr Asn Thr Phe Cys Val Thr Cys Glu Asn Gln Ala Pro
244          85          90          95
246 Val His Phe Val Gly Val Gly His Cys
247          100          105
250 <210> SEQ ID NO: 7
251 <211> LENGTH: 315
252 <212> TYPE: DNA
253 <213> ORGANISM: Artificial Sequence
255 <220> FEATURE:
256 <223> OTHER INFORMATION: Description of Artificial Sequence:Rana pipiens
257      ribonuclease with Met at position 1 and Met24Leu
258      substitution (recombinant Met(-1) RaPLR1 Met23Leu)
260 <220> FEATURE:
261 <221> NAME/KEY: CDS
262 <222> LOCATION: (1)..(315)
263 <223> OTHER INFORMATION: Met(-1) RaPLR1 Met23Leu

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265 <400> SEQUENCE: 7
266 atg caa gac tgg ctt acg ttt cag aag aag cac ctg aca aac acc cgg 48
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268 1 5 10 15
270 gat gtt gac tgt aat aat atc ctg tca aca aac ttg ttc cac tgc aag 96
271 Asp Val Asp Cys Asn Asn Ile Leu Ser Thr Asn Leu Phe His Cys Lys
272 20 25 30
274 gac aag aac act ttt atc tat tca cgt cct gag cca gtg aag gcc atc 144
275 Asp Lys Asn Thr Phe Ile Tyr Ser Arg Pro Glu Pro Val Lys Ala Ile
276 35 40 45
278 tgt aaa gga att ata gcc tcc aaa aat gtg tta act acc ttt gag ttt 192
279 Cys Lys Gly Ile Ile Ala Ser Lys Asn Val Leu Thr Thr Phe Glu Phe
280 50 55 60
282 tat ctc tct gat tgc aat gta aca agc agg cct tgc aag tat aaa tta 240
283 Tyr Leu Ser Asp Cys Asn Val Thr Ser Arg Pro Cys Lys Tyr Lys Leu
284 65 70 75 80
286 aag aaa tca act att aca ttt tgt gta act tgt gag aat caa gct cca 288
287 Lys Lys Ser Thr Ile Thr Phe Cys Val Thr Cys Glu Asn Gln Ala Pro
288 85 90 95
290 gta cat ttc gtg ggt gtc gga cat tgc 315
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296 <211> LENGTH: 105
297 <212> TYPE: PRT
298 <213> ORGANISM: Artificial Sequence
300 <220> FEATURE:
301 <223> OTHER INFORMATION: Description of Artificial Sequence:Rana pipiens
302 ribonuclease with Met at position 1 and Met24Leu
303 substitution (recombinant Met(-1) RaPLR1 Met23Leu)
305 <400> SEQUENCE: 8
306 Met Gln Asp Trp Leu Thr Phe Gln Lys Lys His Leu Thr Asn Thr Arg
307 1 5 10 15
309 Asp Val Asp Cys Asn Asn Ile Leu Ser Thr Asn Leu Phe His Cys Lys
310 20 25 30
312 Asp Lys Asn Thr Phe Ile Tyr Ser Arg Pro Glu Pro Val Lys Ala Ile
313 35 40 45
315 Cys Lys Gly Ile Ile Ala Ser Lys Asn Val Leu Thr Thr Phe Glu Phe
316 50 55 60
318 Tyr Leu Ser Asp Cys Asn Val Thr Ser Arg Pro Cys Lys Tyr Lys Leu
319 65 70 75 80
321 Lys Lys Ser Thr Ile Thr Phe Cys Val Thr Cys Glu Asn Gln Ala Pro
322 85 90 95
324 Val His Phe Val Gly Val Gly His Cys
325 100 105
328 <210> SEQ ID NO: 9
329 <211> LENGTH: 111
330 <212> TYPE: PRT
331 <213> ORGANISM: Artificial Sequence

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